Appl No 10/670,405 Resp dated Apr. 20, 2007 Reply to Office action of Feb 12, 2007

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (Currently Amended) A eatheter treatment element delivery device, comprising: an outer shaft comprising distal and proximal ends;

an inner shaft <u>slidably disposed within and concentric with the outer shaft</u>, comprising <u>a proximal end and</u> distal <u>end configured to engage the outer shaft distal end</u>, and proximal ends, the inner shaft being disposed concentrically inside the outer shaft with <u>wherein</u> the outer shaft distal end is positioned <u>proximate</u> <u>distal</u> to the inner shaft distal end;

a rigid inner member comprising distal and proximal ends, the rigid inner member comprising an interior portion disposed inside the inner shaft and defining a lumen, the rigid inner member being rigidly coupled to the inner shaft; and

wherein the outer shaft is slidable relative to the inner shaft from a first position in which the distal end of the inner shaft is relatively farther spaced from the distal end of the outer shaft, to a second position in which the distal end of the inner shaft is relatively nearer to engages the distal end of the outer shaft; and

a catheter coupled to and extending distally from the rigid inner member distal end

- 2 (Original) The apparatus of claim 1, the rigid inner member further comprising an exterior portion protruding beyond the distal end of the inner shaft
- 3 (Previously Presented) The apparatus of claim 2, further comprising a stepped exterior tube that comprises a wide diameter end and a sheath, the wide diameter end being fixed to the distal end of the outer shaft and fully enclosing the exterior portion of the rigid inner member in the first position
- 4. (Original) The apparatus of claim 1, further comprising gripping portions disposed on the inner shaft and outer shaft.

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5. (Previously Presented) The apparatus of claim 3, the sheath further comprising distal and proximal ends, and being directly movable by movement of the outer shaft from the first position to the second position

6 (Currently Amended) The apparatus of claim 5, further comprising a catheter having a distal end and a proximal end, the proximal end of the catheter being fixed to the rigid inner member, the distal end of the catheter being in which the catheter includes a distal end disposed proximate adjacent the distal end of the sheath.

7. (Original) The apparatus of claim 6, wherein the distal end of the catheter is covered by the distal end of the sheath in the first position, and the distal end of the catheter is uncovered by the distal end of the sheath in the second position.

8. (Original) The apparatus of claim 7, further comprising a stent disposed on the distal end of the catheter

9 (Original) The apparatus of claim 8, wherein the stent is deployed when the distal end of the sheath uncovers the distal end of the catheter by movement of the outer shaft from the first position to the second position

10 (Original) The apparatus of claim 1, further comprising a valve to flush air from the sheath

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11 (Currently Amended) A eatheter treatment element delivery device, comprising: an outer shaft comprising distal and proximal ends;

an inner shaft <u>slidably disposed within and concentric with the outer shaft</u>, comprising a <u>proximal end and a distal end configured to engage the outer shaft distal end, and proximal ends</u>, wherein the inner shaft is disposed concentrically inside the outer shaft with wherein the outer shaft distal end <u>is</u> positioned <u>proximate distal</u> to the inner shaft distal end, wherein <u>and</u> the outer shaft is slidable relative to the inner shaft between a first position in which the distal end of the inner shaft is <u>relatively farther spaced</u> from the distal end of the outer shaft and a second position in which the distal end of the inner shaft <u>is relatively nearer to engages</u> the distal end of the outer shaft;

a rigid inner member having distal and proximal ends and an interior portion disposed inside the inner shaft and defining a lumen within the inner shaft, the proximal end of the rigid inner member being rigidly coupled to the proximal end of the inner shaft, the rigid inner member further comprising an exterior portion protruding beyond the distal end of the inner shaft; and

a stepped exterior tube comprising a wide diameter end and a sheath, the wide diameter end being rigidly coupled to the distal end of the outer shaft and fully enclosing the exterior portion of the rigid inner member in the second position; and

a catheter coupled to and extending distally from the rigid inner member distal end

- 12. (Original) The apparatus of claim 11, further comprising gripping portions disposed on the inner shaft and outer shaft.
- 13. (Original) The apparatus of claim 11, the sheath further comprising distal and proximal ends, and being directly movable by movement of the outer shaft from the first position to the second position

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14 (Currently Amended) The apparatus of claim 13, further comprising a catheter having a distal end and a proximal end, the proximal end of the catheter being fixed to the rigid inner member, the distal end of the catheter being in which the catheter includes a distal end disposed proximate adjacent the distal end of the sheath.

15 (Original) The apparatus of claim 14, wherein the distal end of the catheter is covered by the distal end of the sheath in the first position, and the distal end of the catheter is uncovered by the distal end of the sheath in the second position.

16. (Original) The apparatus of claim 15, further comprising a stent disposed on the distal end of the catheter.

17 (Original) The apparatus of claim 16, wherein the stent is deployed when the distal end of the sheath uncovers the distal end of the catheter by movement of the outer shaft from the first position to the second position.

18. (Original) The apparatus of claim 11, further comprising a valve to flush air from the sheath.

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19. (Currently Amended) A catheter treatment element delivery device, comprising: an outer shaft comprising distal and proximal ends;

an inner shaft <u>slidably disposed within and concentric with the outer shaft</u>, comprising <u>a</u> <u>proximal end and a</u> distal <u>end configured to engage the outer shaft distal end</u>, and <u>proximal ends</u>, <u>wherein the inner shaft is disposed concentrically inside the outer shaft with wherein the outer shaft distal end <u>is</u> positioned <u>proximate distal</u> to the inner shaft distal end, <u>wherein and</u> the outer shaft is slidable relative to the inner shaft between a first position in which the distal end of the inner shaft is <u>relatively farther spaced</u> from the distal end of the outer shaft and a second position in which the distal end of the inner shaft is <u>relatively nearer to engages</u> the distal end of the outer shaft;</u>

a rigid inner member having distal and proximal ends and an interior portion disposed inside the inner shaft and defining a lumen within the inner shaft, the proximal end of the rigid inner member being rigidly coupled to the proximal end of the inner shaft, the rigid inner member further comprising an exterior portion protruding beyond the distal end of the inner shaft;

a stepped exterior tube, comprising a wide diameter end and a sheath, the wide diameter end being rigidly coupled to the distal end of the outer shaft and fully enclosing the exterior portion of the rigid inner member in the second position;

the sheath having distal and proximal ends, and being directly movable by movement of the outer shaft from the first position to the second position;

a catheter, comprising a distal end and a proximal end, the proximal end of the catheter being rigidly coupled to and extending distally from the rigid inner member, the distal end of the catheter being disposed proximate adjacent the distal end of the sheath, the distal end of the catheter being covered by the distal end of the sheath in the first position, and the distal end of the catheter being uncovered by the distal end of the sheath in the second position; and

a stent disposed on the distal end of the catheter, wherein the stent is deployed when the distal end of the sheath uncovers the distal end of the catheter by movement of the outer shaft from the first position to the second position.

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20. (Currently Amended) A method of deploying a catheter treatment element, comprising:

providing an outer shaft comprising distal and proximal ends;

providing an inner shaft <u>slidably disposed within and concentric with the outer shaft</u>, comprising a <u>proximal end and a distal end configured to engage the outer shaft distal end</u>, and <u>proximal ends</u>, <u>disposed concentrically inside the outer shaft with wherein</u> the outer shaft distal end is positioned proximate distal to the inner shaft distal end;

providing a rigid inner member comprising distal and proximal ends, the rigid inner member further comprising an interior portion disposed inside the inner shaft and defining a lumen within the inner shaft, the proximal end of the rigid inner member being rigidly coupled to the proximal end of the inner shaft;

providing a catheter comprising a proximal end and a distal end, the proximal end of the catheter being rigidly coupled to <u>and extending distally from</u> the rigid inner shaft;

providing a sheath comprising a proximal end and a distal end, the proximal end being rigidly coupled to the distal end of the outer shaft, the distal end being disposed proximate the distal end of the catheter; and

uncovering the distal end of the catheter from the distal end of the sheath by moving the outer shaft from a first position in which the proximal end of the outer shaft is relatively farther spaced from the proximal end of the inner shaft to a second position in which the proximal end of the outer shaft is relatively nearer to engages the proximal end of the inner shaft